

SEMICONDUCTOR LASER DEVICE

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Abstract

PURPOSE: To reduce the noise during APC drive and eliminate a ghost by enhancement of the reflectance on the lower-side end surface by a method wherein part of the laser beam emitted from the upper-side end surface of a semiconductor laser element is made as the monitor beam.

CONSTITUTION: A photo transmitting plate 10 is inclined against the upper surface of a metallic package 11, and a photo diode 7 the photoelectric conversion element is bonded in parallel with the main surface of a stem 4. Part of the laser beam emitted from the upper-side end surface of the semiconductor laser element 6 reflects on the inclined plate and is received by the photo diode as the monitor beam, which is photoelectrically converted and then outputted as the monitor current. Since part of the laser beam emitted outside is utilized as the monitor beam, the noise of the laser beam during APC drive of the laser element can be reduced.

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